

Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

nearly plane below or convex behind and subconcave towards the margin, 6-12 centimeters wide and 6-8 centimeters long; margin subobtuse and clothed with a rich dark rhubarb-yellow thin tomentum, at length subglabrous. Pileus with 3-4 broad (2 centimeters) convex zones, the anterior margin of each zone disappearing beneath the posterior margin of the one before it, forming a concentric furrow between each two contiguous zones; surface crustaceous but not polished, becoming brownish black. Pores rhubarb-yellow with a changeable luster, equal, round, 110-120 μ in diameter, about 1 centimeter long, substratose, armed with abundant stout spines, 15-25 by 6-10 μ , mostly swollen Spores ferruginous, globose $3-3\frac{1}{2}\mu$, or ovate-globose $3\frac{1}{2}-4\frac{1}{2}$ by 3-3 $\frac{1}{2}$ μ . Substance of the pileus (above the pores) corky leathery, rhubarb-yellow, repeatedly zoned, 2-3 centimeters thick, holding its thickness well towards the margin. The pores are not decurrent but are limited behind by a narrow definite margin; closely attached to the bark of the tree. What appears to be the same was found some years ago at Potsdam, N. Y., on beech. This differs from Fomes rimosus, Berk, in its pileus not rimose, in its rather smaller spores and spiny hymenium. In M. igniarius the spines are less abundant and shorter and spores hyaline.

NEW SPECIES OF KANSAS FUNGI.

By J. B. Ellis and W. A. Kellerman.

PHYLLOSTICTA VIRIDIS, n. s. On leaves of Fraxinus viridis, Rooks County, Kansas, September, 1888; (E. Bartholomew, 185). On large subindefinite ($\frac{1}{2}$ -1 centimeter) spots visible on both sides of the leaf with a paler shaded margin. Perithecia hypophyllous, numerous, suberumpent, small, $65-80\mu$, of rather coarse cellular structure; sporules abundant, oblong, minute (2 by $\frac{1}{2}\mu$). The spots much resemble those of P. fraxini, E. & M., but that has sporules 5-7 by $2\frac{1}{2}-3\mu$ and much larger epiphyllous perithecia.

Cytispora albiceps, n. s. On bark of Juglans nigra, Manhattan, Kans., March, 1889 (Kellerman & Swingle, 1393). Tubercles semi-emergent, gregarious, $\frac{1}{2}$ to $\frac{3}{4}$ millimeter, depressed conic, opening by a single pore at the obtuse apex, which is covered with white granular matter, 5–6-celled, the cells at first filled with white granular matter and not readily distinguished. Sporules allantoid $4-7\frac{1}{2}$ by $1\frac{1}{4}-2\mu$. Basidia? Much resembles C. leucophthalma, B. &. C., but the specimens of that species in Rav. F. Am., 698, have the tubercles less prominent and smaller and the sporules smaller (3-4 by 1μ). This also differs from C. persicæ, Sz., and C. leucostoma, Sacc.

ASCOCHYTA SISYMBRII, n. s. On S. canescens, Manhattan, Kans. (Kellerman & Swingle, 1221). Spots none; Perithecia scattered on

both sides of the leaf and on the petioles, black, innate, globose-depressed, $200-285\mu$ in diameter, $100-195\mu$ high, pierced above with an aperture about $20-25\mu$ in diameter. Sporules vermiform cylindrical, subhyaline, nucleate and mostly 1-septate, 18-45 by $3\frac{1}{2}-6\mu$, mostly 25-38 by $4-5\mu$. Not to be confounded with *Septoria sisymbrii*, Ell., which is on spots and has smaller spores.

SEPTORIA APARINE, n. s. On the lower dead and withered leaves and stems of *Galium aparine*, Manhattan, Kans., May, 1888 (Kellerman & Swingle, 1223). Perithecia minute, mostly 40– 80μ but sometimes 160– 208μ in diameter, scattered on the leaves and stems but not on spots. Sporules filiform, straight or subundulate, faintly nucleolate, continuous, acute at each end, 40–80 by $1\frac{1}{2}$ – 2μ mostly 50–60 by 2μ . Differs from *S. psilostega*, E. & M., in not being on spots and in its shorter sporules and from *S. galiorum*, Ell. in its partially foliicolous growth, smaller perithecia and much longer spores.

AMEROSPORIUM SUBCLAUSUM, n. s. On fallen leaves of Gymnocladus Canadensis, May, 1888 (Kellerman & Swingle, 1232). Amphigenous, scattered; perithecia black, ovoid-globose $90-150\mu$ in diameter, of coarse cellular structure with a round opening above fringed with spreading brown septate hairs, 60-220 by $5-8\mu$ tapering above. Sporules oblong-cylindrical, obtuse, continuous, hyaline, 10-13 by $2-3\mu$. Differs from A. polynematoides, Speg. in the character of the perithecia.

PESTALOZZIA UNCINATA, n. s. On dead leaves of Quercus tinctoria dried up on broken limbs, St. George, Kans., June, 1888 (Kellerman & Swingle, 1269), with Chatophoma maculosa, Ell. & Morgan. Hypophyllus, gregarious, perithecia scutate, $\frac{1}{4}$ to $\frac{3}{4}$ millimeter in diameter. Spores oblong, pale, 4-septate, sometimes constricted at the second septum above, 18–22 by 5–7 μ , with a short (5–7 μ), stout, curved beak at the apex and a slender pedicel below 15–20 μ long. Differs from P. pallida, E. & E., in its larger perithecia and spores.

BOTRYTIS HYPOPHYLLA, n. s. On living leaves of Teucrium Canadense, Manhattan, Kans., October, 1884 (M. A. Carleton, 142). Forming small white patches at first, soon effused over the entire lower surface of the leaf like a white tomentum. Prostrate hyphæ loosely interwoven, branching; fertile hyphæ erect, 30-150 by $2\frac{1}{2}-3\mu$, continuous, hyaline, subverticillately or rarely dichotomously branched above, the tips muriculate lobate and bearing the globose $3\frac{1}{2}-4\frac{1}{2}\mu$ conidia. Cercospora ferruginea, Fckl. occurs on the same leaves.

Botrytis cinereo-glauca, n. s. On wood under the bark of decayed logs of Ulmus Americana, Manhattan, Kans., March, 1889 (Kellerman & Swingle, 1422). Forming a cinercous and somewhat glaucous continuous layer on the decaying wood under partially adhering bark. The repent hyphæ are branched and loosely interwoven, $2-2\frac{1}{2}\mu$ wide, septate, sometimes slightly swollen above the septa, varying from nearly hyaline to somewhat dusky. Fertile hyphæ erect, 75–100 by $1\frac{1}{2}-2\frac{1}{2}\mu$ wide, hyaline or somewhat dusky at base, at first sparingly and

later abundantly and irregularly branched, the branches usually straight and slightly tapering upward, terminated by a small cluster of oval-oblong 3-5 by $1\frac{3}{4}-2\frac{1}{4}\mu$ hyaline conidia.

OVULARIA CARLETONI, n. s. On Lactuca, Mitchell County, Kans., June, 1886 (M. A. Carleton, 141). Hypophyllous forming patches more or less distinctly limited by the veinlets 2-4 millimeters in diameter and of a pale yellowish color. The leaf is also marked on the upper side with pale yellowish indefinite spots. Hyphæ hyaline, 25-35 by 4-5 μ , with offsets or shoulders on the sides marking the points where the conidia were attached, closely aggregated in minute tuberculiform masses. Conidia oblong-elliptical, hyaline, continuous, 12-15 by 6-7 μ .

CERCOSPORA BARTHOLOMEI, n. s. On Rhus toxicodendron, Rooks County, Kans., September, 1888 (E. Bartholomew, 183 and 248a). Hypophyllous in inconspicuous, indeterminate, smoky-colored, scattered or subconfluent patches. Hyphæ fasciculate, straight or subundulate, nucleate, continuous or sparingly septate, reddish brown (under the microscope) 20–40 (mostly 24–34) by 4–6 μ sometimes branched from near the base, tips entire or subdentate. Conidia nearly hyaline, varying from oblong to slender obclavate and from 20–120 μ long and $2\frac{1}{2}$ –3 μ wide, nucleate becoming 3–8-septate, the shorter ones straight, the longer ones a little curved. This is very different from C. toxicodendri, Ell.

MACROSPORIUM BACCATUM, n. s. On old nuts of Æsculus arguta, Manhattan, Kans., March 1888 (Kellerman & Swingle 1239). Forms a dark olive thin but compact velvety coat on the nut. Fertile hyphæ sparingly branched or simple; torulose, $5-8\mu$ in diameter, the joints occasionally swollen at intervals, nucleate. Conidia terminal, composed of rather loosely aggregated sub-globose cells, having an irregularly lobulated outline, somewhat resembling the fruit of a blackberry, very variable in shape and size, 16-40 by $8-27\mu$, usually without pedicels.

ZIGNOELLA DIAPHANA, (C. & E.). Sacc. var GRACILIS, n. var. On decayed log, Manhattan, Kans., June, 1888 (Kellerman & Swingle 1249). The sporidia are acutely elliptical, 3-4-nucleate, hyaline $11-12\frac{1}{2}$ by $5-6\mu$, and like those in our specimens of Z. diaphana (although Saccardo, in Syll. II, 220, gives the size as 20 by $7\frac{1}{2}\mu$), but the asci, which are 75-87 by $6-9\mu$, are larger; and the perithecia, which are mostly $120-240\mu$ in diameter, and globose-conic or subrostrate, are smaller and more acute. Possibly it should be assigned specific instead of varietal rank.